

## CLAIMS

What is claimed is:

1. A method of rescuing a mammal from a lethal dose of total body irradiation, said method comprising administering marrow stromal cells from an allogenic but otherwise identical donor mammal to an irradiated mammal, thereby rescuing said mammal from a lethal dose of total body irradiation.
2. The method of claim 1, wherein said mammal is selected from the group consisting of a rodent, a horse, a cow, a pig, a dog, a cat, a non-human primate, and a human.
3. The method of claim 2, wherein said mammal is a human.
4. The method of claim 1, wherein said administration is infusion.
5. A method of enhancing hematopoiesis in a mammal, said method comprising administering marrow stromal cells from an allogenic but otherwise identical donor mammal to a mammal, thereby enhancing hematopoiesis in said mammal.
6. The method of claim 5, wherein said mammal is selected from the group consisting of a rodent, a horse, a cow, a pig, a dog, a cat, a non-human primate, and a human.
7. The method of claim 6, wherein said mammal is a human.
8. The method of claim 5, wherein said administration is infusion.
9. A method of enhancing hematopoietic stem cell differentiation in a mammal given a lethal dose of total body irradiation, said method comprising

administering marrow stromal cells from an allogenic but otherwise identical donor mammal to an irradiated mammal, thereby enhancing hematopoietic stem cell differentiation in said mammal.

10. The method of claim 9, wherein said mammal is selected from the group consisting of a rodent, a horse, a cow, a pig, a dog, a cat, a non-human primate, and a human.

11. The method of claim 10, wherein said mammal is a human.

12. The method of claim 9, wherein said administration is infusion.

13. A method of enhancing the hematopoietic recovery in a mammal given a lethal dose of total body irradiation, said method comprising administering marrow stromal cells from an allogenic but otherwise identical donor mammal to an irradiated mammal, thereby enhancing the hematopoietic recovery in said mammal.

14. A method of treating a mammal comprising an ablated marrow, said method comprising administering marrow stromal cells from an allogenic but otherwise identical donor mammal to a mammal, thereby treating said mammal comprising an ablated marrow.

15. A method of enhancing hematopoiesis in a mammal comprising an ablated marrow, said method comprising administering marrow stromal cells from an allogenic but otherwise identical donor mammal to a mammal, thereby enhancing hematopoiesis in said mammal comprising an ablated marrow.

16. A method of increasing survival of a mammal exposed to a lethal dose of total body irradiation, said method comprising administering marrow stromal cells from an allogenic but otherwise identical donor mammal to an irradiated

mammal, thereby increasing the survival of a mammal exposed to a lethal dose of total body irradiation.